



Statement of

National Transportation Safety Board

Before the

Committee on Criminal Justice

Ohio House of Representatives

— *On* —

House Bill 283

Prohibiting driving while using electronic communications device

—
Columbus, Ohio • June 10, 2021



An Independent Federal Agency

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. We determine the probable cause of each accident we investigate and make safety recommendations aimed at preventing future accidents and crashes. The recommendations that arise from our investigations and safety studies are our most important product.

Our accident investigations have clearly shown us that distraction is a growing and life-threatening problem in all modes of transportation. To reduce crashes, injuries, and deaths, drivers and other operators must completely disconnect from an increasing variety of deadly distractions. House Bill 283 is an important step towards changing the culture of driving while distracted by portable electronic devices.

We are extremely concerned about the growing number of highway crashes that involve driver distraction, particularly distraction by portable electronic devices. More than 36,000 people were killed on our nation's highways in 2019, and the National Highway Traffic Safety Administration estimates that nine percent of those fatalities involved distracted drivers¹—deaths that were completely preventable.

Although data on distracted driving are being collected, there is currently no reliable method to accurately determine exactly how many crashes involve portable electronic devices or other distractions; therefore, it is impossible to quantify the true scope of the problem. Police crash reports, for example, are unreliable when it comes to the number of collisions involving electronic device use because drivers are not inclined to volunteer that information. However, our accident investigations and safety studies, and research performed by other agencies, paint a clear picture.

NTSB Accident Investigations

The NTSB has investigated major highway crashes in which distraction due to the use of a portable electronic device was a causal or contributing factor, including the following:

- On February 1, 2002, near Largo, Maryland, a Ford Explorer Sport veered off the left side of the roadway, crossed over a median, flipped over a guardrail, and landed on top of a Ford Windstar minivan. Subsequently, a Jeep Grand Cherokee ran into the minivan. Five people died and one person was injured. We determined that the inexperienced driver of the Ford Explorer was distracted by the use of a handheld cell phone at the time of the accident. Based on this investigation, we asked states to prohibit the use of interactive wireless communication devices by young and novice drivers. (NTSB Safety Recommendation H-03-7)
- On November 14, 2004, an experienced motorcoach driver, distracted by talking on his hands-free cell phone, failed to notice low-clearance warning signs and that the

¹ National Center for Statistics and Analysis. (2021, April). Distracted driving 2019 (Research Note. Report No. DOT HS 813 111). National Highway Traffic Safety Administration.

motorcoach he was following had changed lanes to avoid the low-clearance area. He struck the underside of an arched stone bridge on the George Washington Parkway in Alexandria, Virginia, injuring 11 of the 27 high school students on the bus. In his postaccident interview, the driver stated that, despite the numerous warnings and his knowledge of the route, he did not recall seeing the bridge until the accident occurred. As a result of this investigation, we recommended that states ban the use of cell phones by commercial driver's license holders who have a passenger-carrying or school bus endorsement. (NTSB Safety Recommendation H-06-28)

- On March 26, 2010, near Munfordville, Kentucky, a tractor-trailer went off the left side of an interstate highway, crossed the median, and collided with a 15-passenger van that was traveling in the opposite direction. Eleven people, including the truck driver, died. We determined that the truck driver failed to maintain control of his vehicle because he was distracted by using his cell phone. As a result of this investigation, we expanded our previous recommendation from the 2004 Alexandria crash and asked states to ban the use of cell phones, handheld or hands-free, by all commercial motor vehicle drivers. (NTSB Safety Recommendation H-11-29)
- On August 5, 2010, in Gray Summit, Missouri, a pickup truck ran into the back of a tractor-trailer that had slowed due to an active construction zone on a section of Interstate 44. The pickup truck, in turn, was struck from behind by two school buses. As a result, two people died, and 38 people were injured. The pickup driver sent and received 11 text messages in the 11 minutes preceding the accident. The last text was received moments before the pickup struck the truck-tractor. We concluded that this ongoing texting conversation distracted the driver and contributed to the series of collisions.

Given the accelerating frequency of these accidents, the trends, and the dangerous habits we discovered in many of our accident investigations, in December 2011, we called for a nationwide ban on the use of portable electronic devices while driving.² Whereas previous recommendations addressed specific populations, this recommendation applied to all drivers.

We have seen crashes resulting from electronic device distraction in all modes of transportation, such as the following:

- On September 12, 2008, near Chatsworth, California, a commuter train engineer, who routinely used his cell phone for personal communications while on duty, missed a red signal while distracted by a texting conversation. His train collided head-on with a freight train, killing 25 people, and injuring over 100 people.
- On July 7, 2010, in Philadelphia, a barge being towed by a tugboat ran over an amphibious "duck" boat in the Delaware River, killing two tourists. The tugboat operator was distracted by his repeated use of a cell phone and laptop computer and failed to maintain a proper lookout.

² NTSB Safety Recommendation H-11-39

- On May 28, 2013, in Rosedale, Maryland, a 2003 Mack truck traveling northwest on an access road toward a private grade crossing was struck by a CSX freight train on the right side near the rear axle as the truck crossed the second set of tracks. The impact caused the truck to rotate and overturn. The first 15 cars of the train derailed and a postcrash fire ensued. The driver and responders sustained injuries. Contributing to the crash was the truck driver's distraction due to a hands-free cell phone conversation.
- On May 31, 2014, near Watkins, Colorado, a pilot and/or his passenger appear to have been taking pictures of themselves when the pilot lost control of the plane, causing it to crash. Both the pilot and the passenger were killed.

Research

Epidemiological, driver-simulator, and naturalistic studies all show that the risk of a crash is higher when a driver uses a personal electronic device. These studies, conducted by a variety of institutions, have made the case that portable electronic devices are dangerously distracting to motor vehicle operators.

Portable electronic devices are ubiquitous. According to the Cellular Telecommunications and Internet Association, the international association for the wireless telecommunications industry, there are over 400 million mobile devices in America, or more than one for every person—including children—in the country.

Nearly 80 percent of Americans think that using a cell phone while driving is dangerous. In its 2019 Traffic Safety Culture Index, the AAA Foundation for Traffic Safety reports that the majority of drivers support laws against distracted driving, with over 76 percent of drivers supporting a law against holding and talking on a cell phone, and about 86 percent of drivers supporting a law against reading, typing, or sending a text or e-mail while driving.³

Despite those numbers, the AAA Foundation reported that 43.2 percent of drivers report having driven while talking on a handheld cell phone at least once in past 30 days. More than a third (38.6 percent) of drivers admitted to reading, and almost a third (29.3 percent) to typing a text message or e-mail on a handheld cell phone while driving.

Drivers are more than just visually or manually distracted when using a cell phone or other type of device; they are also cognitively distracted. Using mobile phones can cause drivers to take their eyes off the road, their hands off the steering wheel, and their minds off the road and the surrounding situation. It is this cognitive distraction that appears to have the biggest impact on driving behavior. The distraction caused by mobile devices can impact performance in a number of ways, including causing longer reaction times (notably braking reaction time, but also reaction

³ AAA Foundation for Traffic Safety (2020). *2019 Traffic Safety Culture Index* (Technical Report). Washington, DC: AAA Foundation for Traffic Safety.

to traffic signals), impairing a driver's ability to keep in the correct lane, shortening following distances, and reducing awareness of the driving situation, overall.⁴

The impact of using a mobile phone on crash risk is difficult to ascertain, but studies suggest that drivers who do so are approximately four times more likely to be involved in a crash. This increased risk appears to be similar for both handheld and hands-free phones, suggesting that it is the cognitive distraction that results from using a portable device has the most impact on crash risk.⁵ In fact, the Alexandria, Virginia, motorcoach crash discussed above shows that cognitive distraction is not limited to handheld device use. Two studies examining crash data, one published in the *New England Journal of Medicine* in 1997 and one published in the *British Medical Journal* in 2005, identified as much as a fourfold increase in crash risk when engaging in a cell phone conversation. More recently, in 2011, the Swedish National Road and Transport Research Institute reviewed studies that examined distraction resulting from cell phone use, and found people had longer reaction times when using cell phones, regardless of whether the phone was handheld or hands-free. Likewise, reviews conducted by researchers at Monash University in 2007 and at the University of Calgary in 2008 concluded that performance was degraded when subjects used either a handheld or hands-free cell phone. Further, a series of naturalistic studies by the Virginia Tech Transportation Institute found that the odds ratio for a motor vehicle crash or near-crash involving an experienced driver was 2.49 for dialing and 1.37 for reaching for a phone. A recent study by the AAA Foundation also shows that hands-free is not the same as risk-free. In fact, a driver's level of cognitive distraction is about equal whether using a hands-free or handheld cell phone. Even voice-based systems may not eliminate distraction and may have unintended effects on traffic safety.

Multipronged Approach

Changing drivers' behavior will undoubtedly require a cultural shift, and that shift will require a three-pronged approach including better laws, education, and enforcement. We have seen this approach work with other highway safety initiatives, such as increasing seat belt and child restraint use and curbing drunk and drugged driving. Public education continues to be important for reaching drivers, operators, and safety-critical personnel about the dangers of distractions, but education campaigns must be built on a foundation of strong laws and effective, visible enforcement.

Past safety campaigns have shown that laws aimed at changing behavior are much more likely to have long-term success when combined with high-visibility enforcement and public information campaigns. For example, only 14 percent of vehicle occupants used seat belts before states started passing laws requiring them. After laws were enacted, belt use jumped to 59 percent in approximately 8 years. Today, with stronger seat belt laws, high-visibility enforcement, and education campaigns, daytime seat belt use is 90 percent. Other issues have seen similar results. Over the last 30 years, this multipronged approach has changed the way drinking and driving is perceived—it is no longer socially acceptable to consume alcohol or other drugs and drive. Education, legislation, and enforcement complement each other.

⁴ World Health Organization. Mobile phone use: a growing problem of driver distraction. Geneva, Switzerland: 2011.

⁵ Ibid.

Conclusion

Efforts to date have tackled specific aspects of electronic device distraction. For example, 24 states and the District of Columbia ban handheld phone conversations by all drivers. In a study of three early hands-free laws, the Insurance Institute for Highway Safety found that all-driver bans on handheld phone conversations can have large and lasting effects on phone use.⁶ However, although they have a positive effect on safety, these laws do nothing to address the distraction posed by hands-free device use.

Distraction is unsafe. It takes the driver's attention away from the driving task, and portable electronic devices increase the risk of distraction, regardless of whether they are used for texting or hands-free talking and listening. What's more, as the number of drivers using personal electronic devices continues to increase, so does the risk to everyone on the road.

Distraction is not just about holding a device in your hand or glancing away from the road; it is also about mentally straying from the driving task. Drivers may think that effective multitasking is possible, but research studies, statistics, and lives lost show this is not the case. Even a driver's momentary distraction from the driving task—such as by scanning a text message or talking on a hands-free phone—can have catastrophic consequences.

The NTSB's mission is to improve safety by recommending measures to prevent crashes, reduce injuries, and save lives. Our investigations suggest that this means getting drivers to focus on driving safely, rather than engaging in a conversation or text message on a cell phone or other portable electronic device.

We believe a significant number of lives can be saved and injuries avoided if Ohio expands and strengthens its law to prohibit all nonemergency use of all portable electronic devices. We must change the culture of distracted driving, which HB 283 is intended to do. It is time to acknowledge that distracted driving is a serious safety risk, not just to distracted drivers, but to everyone on the road. No text, no call, no update is ever worth a human life.

Thank you for your consideration of this important issue.

⁶ McCartt AT, Hellinga LA, Strouse LM, Farmer, CM. *Traffic Injury Prevention (TIP) Master File*, March 2010.